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10/605,172	09/12/2003	**Ivan N. Wakefield**	U030031.45	2171

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EXAMINER	
LE, TUAN H	

ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/605,172	WAKEFIELD, IVAN N.	
	Examiner	Art Unit	
	TUAN H. LE	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,7-25,32-42 and 48-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,7-25,32-42 and 48-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/11/08 have been fully considered but they are not persuasive.

Regarding **claims 1, 17, 32, and 48,** the applicant submits that Dutta (US 2003/0076408) does not disclose automatically identifying a plurality of possible classes of data in the image by decoding and analyzing pixels in the image, Remarks, page 10-11. However, the examiner respectfully disagrees.

Specifically, in addition to the display of the reconstructed image, the image is converted into text by an optical character recognition (OCR) program and stored in appropriate database such as a list of telephone numbers, internet address, email address, name, etc.. With the text conversion and the storage of the converted text into appropriate database, it is inherent that decoding and analyzing pixels in the image is performed and that automatic identification is also performed on the image data without involvement of human beings but a processor (Dutta, paragraph [0023]). Therefore, Dutta (US 2003/0076408) discloses automatically identifying a plurality of possible classes of data in the image by decoding and analyzing pixels in the image.

Also, the applicant submits that Dutta does not disclose automatcially performing a predetermined function associated with the class of data including performing commands contained in the image in response to the class of data being identified in the image, Remarks, page 11. However, the examiner respectfully disagrees.

Specifically, Dutta discloses the converted text comprising telephone number, internet addresses, and email addresses is used to initiate a telephone call, browse the Internet, and send an email message (Dutta, paragraph [0023]). It is inherent that the initiated phone call is in response to the identified telephone number. The similar interpretation is applied to browsing internet and sending an email message. Since the applicant does not specifically and clearly define commands contained in the image, the telephone number, internet addresses, and email addresses as shown by Dutta equally constitute commands contained in the image. Therefore, Dutta discloses automatcially performing a predetermined function associated with the class of data including performing commands contained in the image in response to the class of data being identified in the image.

Regarding motivation for combining Dutta (US 2003/0076408) and Rhoads et al (US 2002/0062382), they are processor-based systems and related to image capture and processing, thus one of ordinary skill in the art would combine to achieve the device for communication as claimed in claims **1, 17, 32, and 48.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5, 7-25, 32-42, and 48-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta (U.S. Pub. 2003/0076408) in view of Rhoads (U.S. 2002/0062382 to Rhoads et al).

Regarding **claim 1**, Dutta discloses a device for communication (Dutta, Fig. 1,Fig. 2, and Fig. 3), comprising:

an optical sensor (204) to capture an image; and

a processor (304), the processor configured to automatically identify a plurality of possible classes of data in the image by decoding and analyzing pixels in the image, the processor identifying a class of data in the image of the plurality of classes of data and automatically performing a predetermined function associated with the class of data including performing commands contained in the image in response to the class of data being identified in the image, each of the plurality of possible classes of data having an associated predetermined function (Dutta, Fig. 3, paragraph [0023], wherein a captured image is converted into text by an optical character recognition OCR program),

wherein the plurality of possible classes of data comprise data visible to a human eye and data unintelligible to a human eye (Dutta, Fig. 3 and paragraph [0025], wherein the object for the camera module can be text or bar code).

However, Dutta does not disclose at least one of subliminal data, data formed using steganography, or watermarking.

On the other hand, Rhoads discloses at least one of subliminal data, data formed using steganography, or watermarking (Rhoads, Abstract, Fig. 1, and paragraph [0033], wherein a user can hold an image containing a collateral data in front of a computer and

101 and the computer 102 will extract the collateral data and direct the computer's browser to a particular website 104).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the collateral information extraction as described by Rhoads into the communication device as described by Dutta in order to access a website because such incorporation allows a user to access the website that is more appropriate for the user at that particular time, (Rhoads, Abstract).

Regarding **claim 2**, Dutta and Rhoads disclose the device of claim 1. In addition, Dutta discloses the optical sensor comprises one of a charge coupled device, a complimentary metal oxide semiconductor (CMOS) and a camera (Dutta, Fig. 3 and paragraph [0018]).

Regarding **claim 3**, Dutta and Rhoads disclose the device of claim 1. In addition, Dutta discloses a data structure including computer-executable instructions executable by one of the optical sensor and the processor to decode pixels in the image to identify or select the class of data (Dutta, Fig. 3 wherein software 318 includes a data structure).

Regarding **claim 5**, Dutta and Rhoads disclose the device of claim 1. In addition, Dutta discloses a display (104) to display at least one of the image and the class of data (Dutta, Fig. 1 and paragraph [0015]).

Regarding **claim 7**, Dutta and Rhoads disclose the device of claim 1. In addition, Dutta discloses the plurality of possible classes of data comprise at least one of a phone number, a list of phone numbers, a bar code, access information to a web site, a sequence of commands, and information associated with a product or service (Dutta,

paragraphs [0023] and [0025], wherein bar code, text, web address, phone number are disclosed and accessed).

Regarding **claim 8**, Dutta and Rhoads disclose the device of claim 7. In addition, Dutta discloses the sequence of commands comprises commands to be performed automatically by a communication device (Dutta, Fig. 1 and paragraph [0023], wherein the mobile phone automatically can initiates a call given a decoded phone number).

Regarding **claim 9**, Dutta and Rhoads disclose the device of claim 8. In addition, Dutta discloses the communication device comprises a cellular telephone (Dutta, Fig. 1).

Regarding **claim 10**, Dutta and Rhoads disclose the device of claim 7. In addition, Dutta discloses the sequence of commands comprises commands to be performed by a communication device in response to a password (Dutta, paragraph [0023], wherein sending an requires an password).

Regarding **claim 11**, Dutta and Rhoads disclose the device of claim 10. In addition, Dutta discloses the communication device comprises a cellular telephone (Dutta, Fig. 1).

Regarding **claim 12**, Dutta and Rhoads disclose the device of claim 10. In addition, Dutta discloses at least one of a user interface and a voice recognition function to enter the password (Dutta, Fig. 1 and paragraph [0015], wherein keyboard 112 is used).

Regarding **claim 13**, Dutta and Rhoads disclose the device of claim 1. In addition, Dutta discloses the optical sensor (204) is operable to capture the image from

one of a television, a video monitor, and a fixed medium (Dutta, abstract, wherein an object is in low light condition).

Regarding **claim 14**, Dutta and Rhoads disclose the device of claim 1. In addition, Dutta discloses the predetermined function comprises at least one of transmitting a signal to order a product or service, decoding data from one or more images to reprogram a communication device, downloading communication device setup parameters, storing one or more phone numbers, establishing a call, storing information associated with a web site or email address, accessing a web site, and sending an email message (Dutta, paragraph [0023]).

Regarding **claim 15**, Dutta and Rhoads disclose the device of claim 14. In addition, Dutta discloses transmitting a signal to order a product or service comprises sending one of a short message service (SMS) message, email message, or voice or data message, each including information associated with a purchaser (Dutta, paragraph [0023], a mobile phone is associated with at least one user).

Regarding **claim 16**, Dutta and Rhoads disclose the device of claim 14. In addition, Dutta discloses a user interface (112) to at least one of select the class of data from the image, edit the class of data, store the class data and transmit the class of data (Dutta, Fig. 1 and paragraphs [0015] and [0023], wherein information of the captured image is sent from the mobile phone).

Regarding **claim 17**, Dutta discloses a device for communication (Dutta, Fig. 1,Fig. 2, and Fig. 3), comprising:

an optical sensor (204) to capture an image;

a processor (304), wherein a data structure operable in association with one of the optical sensor, the processor and a mobile system includes computer-executable instructions capable of automatically identifying a plurality of possible classes of data in the image by decoding and analyzing pixels in the image, the computer-executable instructions identifying a class of data in the image of the plurality of possible classes of data (Dutta, Fig. 3, paragraph [0022], wherein software 318 is used for processing capture image);

another data structure operable in association with the processor (304) to automatically perform a predetermined function associated with the class of data including performing commands contained in the image in response to the class of data being identified in the image, each of the plurality of possible classes of data having an associated predetermined function (Dutta, Fig. 3, paragraph [0023], wherein for corresponding identified data, the device initiates a telephone call, browses internet, and sends e-mail message); and

a transmitter (106) to transmit signals in response to the class of data (Dutta, Fig. 1, paragraph [0015], wherein transmission of data is performed),

wherein the plurality of possible classes of data comprise data visible to a human eye and data unintelligible to a human eye (Dutta, Fig. 3 and paragraph [0025], wherein the object for the camera module can be text or bar code).

However, Dutta does not disclose at least one of subliminal data, data formed using steganography, or watermarking.

On the other hand, Rhoads discloses at least one of subliminal data, data formed using steganography, or watermarking (Rhoads, Abstract, Fig. 1, and paragraph [0033], wherein a user can hold an image containing a collateral data in front of a computer and 101 and the computer 102 will extract the collateral data and direct the computer's browser to a particular website 104).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the collateral information extraction as described by Rhoads into the communication device as described by Dutta in order to access a website because such incorporation allows a user to access the website that is more appropriate for the user at that particular time, (Rhoads, Abstract).

Regarding **claim 18**, Dutta and Rhoads disclose the device of claim 17. In addition, Dutta discloses the data structure operable in association with one of the optical sensor, the processor and the mobile system includes computer-executable instructions executable by one of the optical sensor, the processor and the mobile system to decode pixels in the image to identify or select the class of data (Dutta, Fig. 3, paragraph [0022], wherein software 318 is used for processing capture image and includes a data structure).

Regarding **claim 19**, Dutta and Rhoads disclose the device of claim 17. In addition, Dutta discloses a storage device (306) to store at least one of the image and the class of data (Dutta, Fig. 3).

Regarding **claim 20**, Dutta and Rhoads disclose the device of claim 17. In addition, Dutta discloses a display (104) to display at least one of the image and the class of data (Dutta, Fig. 1 and paragraph [0015]).

Regarding **claim 21**, Dutta and Rhoads disclose the device of claim 20. In addition, Dutta discloses at least one function button to select the class of data from the image (Dutta, Fig. 1 and paragraph [0015], wherein keyboard 112 is used).

Regarding **claim 22**, Dutta and Rhoads disclose the device of claim 21. In addition, Dutta discloses a pointing device to select the class data from the image (Dutta, Fig. 1 and paragraph [0015], wherein inherent part of keyboard 112 is used).

Regarding **claim 23**, Dutta and Rhoads disclose the device of claim 17. In addition, Dutta discloses a user interface to at least one of select the class data from the image, edit the class of data, store the class of data and transmit the class of data (Dutta, Fig. 1 and paragraph [0015], wherein keyboard 112 is used).

Regarding **claim 24**, Dutta and Rhoads disclose the device of claim 17. In addition, Dutta discloses the class of data comprises at least one of a phone number, a list of phone numbers, access information to a web site, a sequence of commands, and information associated with a product or service (Dutta, paragraph [0023]).

Regarding **claim 25**, Dutta and Rhoads disclose the device of claim 17. In addition, Dutta discloses the predetermined function comprises one of transmitting a signal to order a product or service, decoding data from one or more images to reprogram a communication device, downloading communication device setup parameters, storing one or more phone numbers, establishing communications, storing

information associated with a web site or email address, accessing a web site, and sending an email message (Dutta, paragraph [0023]).

Regarding **claim 32**, the same ground of rejection as in claim 1 is applied.

Regarding **claim 33**, Dutta and Rhoads disclose the device of claim 32. In addition, Dutta discloses decoding pixels in the image to identify or select the class of data (Dutta, paragraph [0023], wherein OCR program is used).

Regarding **claim 34**, same ground of rejection as in claim 5 is applied.

Regarding **claim 35**, same ground of rejection as in claim 7 is applied.

Regarding **claim 36**, same ground of rejection as in claim 8 is applied.

Regarding **claim 37**, same ground of rejection as in claim 10 is applied.

Regarding **claim 38**, same ground of rejection as in claim 12 is applied.

Regarding **claim 39**, same ground of rejection as in claim 14 is applied.

Regarding **claim 40**, same ground of rejection as in claim 15 is applied.

Regarding **claim 41**, Dutta and Rhoads disclose the method of claim 39. In addition, Dutta discloses retrieving purchaser information from a data source in response to transmitting a signal to order a product or service, (Dutta, paragraph [0023], wherein the mobile phone is associated with at least one user).

Regarding **claim 42**, same ground of rejection as in claim 16 is applied.

Regarding **claim 48**, the same ground of rejection as in claim 17 is applied.

Regarding **claim 49**, Dutta and Rhoads disclose the computer readable-medium of claim 48. In addition, Dutta discloses decoding pixels in the image to identify or

select the class of data (Dutta, Fig. 3, paragraphs [0022] and [0023], wherein OCR program is used).

Regarding **claim 50**, the same ground of rejection as in claim 24 is applied.

Regarding **claim 51**, the same ground of rejection as in claim 18 is applied.

Regarding **claim 52**, Dutta and Rhoads disclose the computer readable-medium of claim 50. In addition, Dutta discloses performing the sequence of commands in response to a password (Dutta, paragraph [0023] wherein a password is associated with at least the email-message).

Regarding **claim 53**, the same ground of rejection as in claim 25 is applied.

Regarding **claim 54**, Dutta and Rhoads disclose the computer readable-medium of claim 53. In addition, Dutta discloses transmitting a signal to order a product or service comprises sending one of a short message service (SMS) message, an email message, or a voice or data message, each including information associated with a purchaser, (Dutta, paragraph [0023], wherein information of a user is associated with the mobile phone).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN H. LE whose telephone number is (571)270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan H Le/
Examiner, Art Unit 2622

/Sinh N Tran/
Supervisory Patent Examiner, Art Unit 2622